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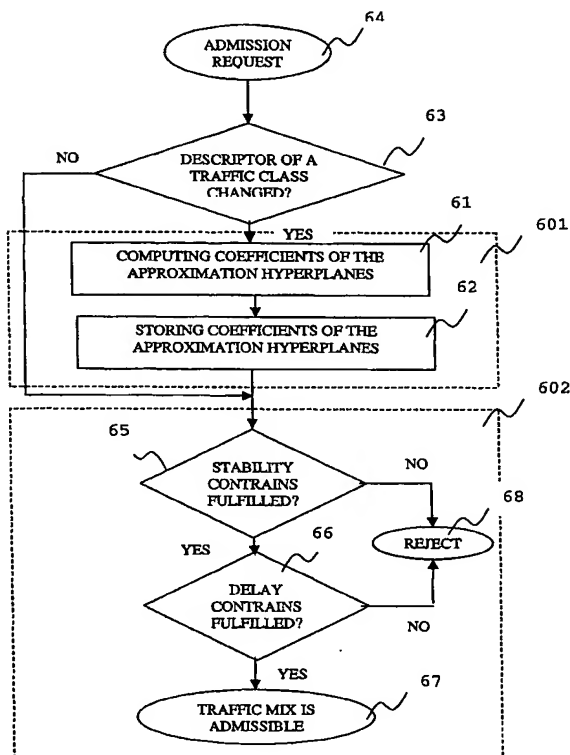
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(54) Title: **CALL ADMISSION CONTROL SYSTEM AND METHOD FOR INTERPRETING SIGNALING MESSAGES AND CONTROLLING TRAFFIC LOAD IN INTERNET PROTOCOL DIFFERENTIATED SERVICES NETWORKS**



(57) Abstract: A call admission control system and method for Internet Protocol (IP) Differentiated Services (DiffServ) network having at least one node for interpreting signaling messages and controlling traffic load in the network. The method consists of an initialization (601) and a real-time phase (602). In initialization phase (601), coefficients of the approximating hyperplanes are computed (61) and stored (62). This phase is repeated when the descriptor of a traffic class changes (63), which usually happens when nodes are configured or reconfigured. A traffic mix is admissible (67), if for each real-time traffic class both the stability (65) and the delay (66) constraints are fulfilled. Stability is tested by evaluating the number of lost packets and comparing it to the tolerated packet loss ratio for each class in that queue. Delay constraint is tested by checking if the traffic mix is below at least one of the approximating hyperplanes in the space of number of sessions for each class.



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